

1 NATIONAL TRANSPORTATION SAFETY BOARD  
2 VERBATIM TRANSCRIPT OF INTERVIEW WITH  
3 QC  
4

5 ET3 (SS) DUSTIN J. BRUNER, USN  
6

7 CONDUCTED AT COMMANDER, SUBMARINE SQUADRON 1 CONFERENCE  
8 ROOM, 822 CLARK STREET, BUILDING 661, PEARL HARBOR, HAWAII  
9

10 ON 17 FEBRUARY 2001  
11

12 MR. ROTH-ROFFY: Good morning. It is now 1036, the date is  
13 17<sup>th</sup> of February 2001. We are here interviewing Petty  
14 Officer Bruner. Good morning Petty Officer Bruner. My  
15 name is Tom Roth-ROFFY and I am an investigator with the  
16 National Transportation Safety Board. The National  
17 Transportation Safety Board is here investigating the  
18 accident between the USS GREENVILLE and the fishing vessel  
19 EHIME MARU that occurred on February 9<sup>th</sup> 2001. For your  
20 information, the NTSB safety board is a U.S. federal  
21 government agency responsible for investigating  
22 transportation accidents. The safety board's office of  
23 marine safety, in which I work, is responsible for  
24 investigating major marine accidents that occur on the  
25 waterways of the United States. The purpose of the safety  
26 board's investigation is to determine the cause of the  
27 accident and to make recommendations aimed at preventing  
28 future reoccurrence of similar accidents. In our  
29 investigation, we make no effort to assign blame for the  
30 accident, nor do we have legal authority to penalize any  
31 people involved in the accident. Our investigation is  
32 strictly - - strictly a safety investigation and not a  
33 legal investigation. If you desire you may have another  
34 person assist you with the interview. Would you like to  
35 have somebody to assist you or do you feel that you can  
36 make it through on your own?

37  
38 (No audible response)  
39

40 MR. ROTH-ROFFY: Also joining me in the interview are those  
41 seated here. We have representatives from the United  
42 States Coast Guard and United States Navy and I would like  
43 the other interviewers to introduce themselves now.  
44

45 MR. WOODY: Good morning, I am Bill Woody from NTSB.  
46

47 MR. STRAUCH: I am Barry Strauch from the NTSB.

1  
2 LT JOHNSON: LT Charlie Johnson, United States Coast Guard.  
3  
4 LT(jg) KUSANO: LT(jg) Ken Kusano, United States Coast  
5 Guard.  
6  
7 LCDR PETERSON: LCDR Craig Peterson, United States Coast  
8 Guard.  
9  
10 LCDR SANTOMAURO: LCDR Rich Santomauro, United States Navy.  
11  
12 LT HEDRICK: LT Doug Hedrick. United States Navy. And  
13 just in case it was not mentioned before. If you want to  
14 take a break, step up, step out for a few minutes you can.  
15 Can I get you some water or coffee?  
16  
17 WIT: No thank you.  
18  
19 LCDR SANTOMAURO: Two other United States Navy members are  
20 CDR CACCIVIO and CAPT Tom Kyle.  
21  
22 MR. ROTH-ROFFY: Okay Petty Officer Bruner, what I would  
23 like you to do now is to think back to the morning of  
24 February 9<sup>th</sup>, Friday morning, and try to visualize what you  
25 were doing that morning starting with the time you reported  
26 onboard. The submarine got underway and then proceed if  
27 you would in a narrative description of your activities  
28 through the morning and to a period of time up after the  
29 collision and we will let you know when to stop. Just  
30 think about what you were doing. What your activities  
31 were, what people may have told you to do, and what you  
32 saw, what you heard, you know your observations during that  
33 period of time. I would like you to please continue with  
34 your narrative without interruptions from the interviewers  
35 from start to finish and after you are done with that, we  
36 will ask you a few detailed questions - - regarding that.  
37 So at this time, please go ahead. So go ahead and begin.  
38  
39 WIT: Okay. I reported onboard that morning and I am  
40 working with the food service division right now. So I was  
41 actually helping serve breakfast and lunch. And um, when  
42 we did are deep dive I went down and I was actually in the  
43 twenty one man berthing watching um, the deck control  
44 valves, just ah, I was up there for a hour - - a hour and  
45 half. At the completion of the deep dive we came back up.  
46 And I went back to the galley and helped the food service  
47 group and we prepared for the emergency blow. I got

1 permission to go to radio and I got permission to assume a  
2 U/I on the WLR-8 for the ESM watch. We did our initial PD  
3 before the emergency blow, we came up. I started an  
4 initial search. I started the machinery around eighty  
5 feet. It ran through and as we came up to the PD level I  
6 believe I held three contacts none of which were a threat  
7 level. So I made the correct call of the report to the OOD  
8 of "no close contacts". And um, I started to process and  
9 get information on the contacts, but we went and did the  
10 emergency deep so I didn't have time to complete a  
11 defensive search, just the first one. While we were up  
12 there, I handed the headphones to ET1 Carter, my  
13 overinstruction. He listened and verified that they were  
14 not threat level contacts and then handed me the headphones  
15 back and so I could start on the classification of the - -  
16 working on the info for the contacts. But that is when we  
17 went emergency deep for training and I lost the contacts  
18 because we weren't able to receive the info. So under  
19 water the ESM watch really is ineffective, so when they  
20 called the emergency blow, we came up. That was my first  
21 time ever doing one, so I was really curious as to what it  
22 was going to feel like and we came up and felt the bow  
23 level out and start on its way down and it initially shook  
24 really bad and um, I asked ET1 Carter and ET3 Hunt "is that  
25 what it sounds like", and they were kind of like noticing  
26 that something was wrong and they said "that is not what it  
27 usually sounds like". So as we felt the bow of the ship  
28 finally steady on the water, obviously the rudder hit the  
29 fishing vessel. The ship shook very badly and that is when  
30 we heard the Captain announce the collision over the ILC.  
31 And um, for a collision I have to go back to food service  
32 division for the emergency medical attention team. So, I  
33 gave the headphones back to ET1 Carter and he took back  
34 over the watch and I went back aft to the galley to help  
35 prepare for the collision. I wasn't back in radio for  
36 maybe an hour. I um, went back down to the galley and the  
37 first thing I did was escort the civilians to the torpedo  
38 room and I stayed down there and I came back up and went  
39 back aft numerous times, into the fan room numerous times  
40 just gathering equipment for the search and rescue. And  
41 went to the wardroom and helped prepare the wardroom for  
42 attention if - - for the fishing vessel crewmembers that  
43 needed any medical attention. At that time we were still  
44 having divers rig the bridge. After that was finally set  
45 up and the Doc and everyone was prepared there, I checked  
46 with crew's mess and they were just awaiting word to go up.  
47 I went back to radio and just kind of stood by, because we

1 were in the process of radio transmissions with COMSUBPAC  
2 and there was really nothing, just kind of waiting on  
3 Senior Chief Smith, just kind of watching the process of  
4 the radio transmissions.  
5  
6 MR. ROTH-ROFFY: Okay. I think that is probably far  
7 enough. I would like to go back and ask a few more  
8 detailed questions about your experience there. You  
9 indicated that you got permission to go into radio after  
10 doing your mess duties, do I have that correct?  
11  
12 WIT: Well I am a radioman so I will always have permission  
13 to enter there so I just entered and asked ET1 Carter to  
14 have permission to sit the U/I.  
15  
16 MR. ROTH-ROFFY: You asked ET1 Carter to sit the U/I?  
17  
18 WIT: Well, he was the U/I - - or he was the ESM operator  
19 at the time. And I just asked him permission - - because I  
20 am actually qualifying in the watch and I just need the  
21 time. So I just asked him for permission to sit the U/I  
22 and he gave me permission.  
23  
24 MR. ROTH-ROFFY: Okay. How many times have you operated  
25 the ESM equipment? What did you call it, the W?  
26  
27 WIT: WLR-8.  
28  
29 MR. ROTH-ROFFY: Okay.  
30  
31 WIT: I went to school on it and I was in Groton for a year  
32 learning the radio equipment and the month underway that we  
33 went through acoustic trials I was standing U/I, I probably  
34 stood eight to ten surfaces, so I have been running the  
35 equipment.  
36  
37 MR. ROTH-ROFFY: So you were actually the vessel - - when  
38 the submarine went to periscope depth you were manning the  
39 ESM headphones?  
40  
41 WIT: Yes.  
42  
43 MR. ROTH-ROFFY: And is there a seat or something that you  
44 sit in front of to view the console or the indicator?  
45

1 WIT: There's a bench locker that you sit on and you have  
2 full control and ET1 Carter was directly to my left over my  
3 shoulder watching me, watching my actions.  
4  
5 MR. ROTH-ROFFY: And how do you determine whether, if you  
6 have a close contact or not?  
7  
8 WIT: The level that it comes in. By the way that it picks  
9 it up is - - say a radar per se how you pick it up by  
10 signal strength three which is, every cont - - you would  
11 hear it every sweep, four and five which is considered a  
12 threat contact is a four, you would hear it every time, it  
13 is so close you would hear the side lobes and a five is the  
14 complete saturation which is say a plane is right on top of  
15 you.  
16  
17 MR. ROTH-ROFFY: And how - - what would be classified as a  
18 close contact?  
19  
20 WIT: A signal four or a signal five contact.  
21  
22 MR. ROTH-ROFFY: Okay, did you hear a signal four or five  
23 when you surfaced for periscope depth?  
24  
25 WIT: No I did not, sir.  
26  
27 MR. ROTH-ROFFY: When you went to periscope depth, sorry.  
28 Where you located when the submarine went to the emergency  
29 main ballast tank blow?  
30  
31 WIT: I was just sitting there right in front of the panel.  
32  
33 MR. ROTH-ROFFY: And during that emergency ascent, did you  
34 also check for ESM contacts?  
35  
36 WIT: Um, when we actually get to the surface we assume it  
37 again, but because of the ascent and the radio antenna's  
38 actually has to be out of the water so the bow comes out.  
39 Once we actually surface, we you know, assume the watch  
40 again, but it is usually only done at periscope depth, I  
41 mean it is used every time when you come to the surface,  
42 but usually after you surface, you shift to the radar.  
43  
44 MR. ROTH-ROFFY: During the emergency ascent, do you report  
45 no close contacts?  
46  
47 WIT: Only during the periscope depth operation.

1  
2 MR. ROTH-ROFFY: I think that is all I have. I would like  
3 to pass you to Mr. Bill Woody.  
4  
5 MR. WOODY: Could I get your rate, are you a RM or is it ET  
6 now a days?  
7  
8 WIT: It is converted. I would have been a radioman, but  
9 it is converted now. I am a electronics technician.  
10  
11 MR. WOODY: ET3?  
12  
13 WIT: Yes.  
14  
15 MR. WOODY: And your first name and middle initial?  
16  
17 WIT: Dustin J.  
18  
19 MR. WOODY: D-U-S-T-O-N?  
20  
21 WIT: I-N.  
22  
23 MR. WOODY: I-N. J as in Juliet?  
24  
25 WIT: Yes.  
26  
27 MR. WOODY: Just on the number of hits. Do you recall two  
28 hits or when the ship came up from the emergency blow?  
29  
30 WIT: Ah, during the emergency blow, I um, right after that  
31 I handed; during the initial PD - - -  
32  
33 MR. WOODY: I am not speaking about the - - I mean about  
34 the the collision.  
35  
36 WIT: Oh, the collision.  
37  
38 MR. WOODY: How many bumps or shocks did you feel?  
39  
40 WIT: I remember two.  
41  
42 MR. WOODY: You remember two. Okay. And what was the  
43 signal strength for those three contacts that you did pick  
44 up?  
45  
46 WIT: I believe I did have one signal strength one and a  
47 two and a three.

1  
2 MR. WOODY: A part of that that I didn't catch altogether  
3 was that you started to make a sweep of some sort. You  
4 were going - - I thought I heard you say two things,  
5 analyze the signal and then you were going to do some type  
6 of search or sweep around?  
7  
8 WIT: That's just how - - um that is just how the radar  
9 actually, that is how it receives stuff like say a radar is  
10 sweeping you are going to pick up the head when the radar  
11 is pointing at you. That is when you are going to pick it  
12 up.  
13  
14 MR. WOODY: Okay. You start your ah, your study of the  
15 signal, then the ship went down, - - - -  
16  
17 WIT: Yes.  
18  
19 MR. WOODY: Okay. I will later have a few personnel  
20 questions that we ask everyone, we will do that last. I  
21 have nothing further now.  
22  
23 MR. STRAUCH: Hi. This is Barry Strauch. You said that  
24 you did not have time to finish a defensive search?  
25  
26 WIT: Correct. We came up and you do the initial which is  
27 the time limit that you are supposed to fall into is when  
28 the officer of the deck completes his visual searches. You  
29 are supposed to sweep all the bands and be able to tell if  
30 there is a threat contact and I did that in the time  
31 requirement. There was no signal fours or signal fives, so  
32 there was no threat contacts, so I just started the  
33 analyzation you know you try to get the pulse width and  
34 everything so you can see exactly what it is. Um, we went  
35 down before I was able to analyze the contacts.  
36  
37 MR. STRAUCH: Okay. By defensive searching you are  
38 analyzing the contacts. You had already determined that  
39 there were no close contacts at that point.  
40  
41 WIT: Correct.  
42  
43 MR. STRAUCH: Um, then you went back to the galley to help  
44 with the mess?  
45  
46 WIT: Yes.  
47

1 MR. STRAUCH: Um, okay. Is it possible to have a um, and  
2 forgive me if I don't express the terms correctly, is it  
3 possible to have a vessel close by that has it's radar on  
4 that you are picking up as a signal three or less, even  
5 though it is close by?  
6  
7 WIT: It would depend on the rotation of their radar. If  
8 their radar is running so slow that it is not going to pick  
9 it up, then it's possible. But a normal radar by search,  
10 search navigation of parameters, it is required to move so  
11 fast that it would pick up in a signal four or signal five.  
12  
13 MR. STRAUCH: Okay. What would be the average rotation  
14 rate that you would anticipate?  
15  
16 WIT: Um, I don't know if I can give that answer.  
17  
18 MR. STRAUCH: Oh.  
19  
20 LT HEDRICK: This is LT Hedrick. You can answer that, he  
21 is just asking in your experience what the average rotation  
22 rate is of the commercial radar's that you see out there.  
23  
24 MR. STRAUCH: That is correct.  
25  
26 WIT: Usually you are going to have a pulse - - - -  
27  
28 LT HEDRICK: No, no. Not a pulse rate a rotation rate.  
29  
30 WIT: A rotation rate of below one. At least have um, - -  
31 - -  
32  
33 LT HEDRICK: LT Hedrick again. Can I have, Mr. Strauch to  
34 try and rephrase the question. I think what he is asking  
35 with the rotation rate of the radar is say for a contact  
36 that you are receiving sweeps on, how often are you  
37 receiving a hit of that sweep?  
38  
39 MR. STRAUCH: Sweep right.  
40  
41 LT HEDRICK: Um, sweep right.  
42  
43 WIT: Usually you are going to pull, by the way, the way we  
44 are receiving we are going to pull at least three a second  
45 but usually it is more frequent or less frequent depending  
46 on the distance away from you. But a normal signal



1 strength three you are going to pull around three a second  
2 if not more.  
3  
4 MR. STRAUCH: Okay. So the vehicle would have to have less  
5 than three per second if it is close by for you to perceive  
6 it as a signal three or less?  
7  
8 WIT: Depending on the type of radar, they are all  
9 different primaries, but the closer they are, the by - - it  
10 is just picking up the side lobes which that is indicating  
11 that it is closer. Because you are closer than, because  
12 the head beam stretches farther. So you are inside that  
13 head beam and you are actually that's what is telling you  
14 by pick up of lobes that you are close and within a signal  
15 four which would be dangerous so. You would want to get  
16 away.  
17  
18 MR. STRAUCH: Okay. Um, all right that is all. Thank you.  
19  
20 LT JOHNSON: How are you doing. This is LT Johnson with  
21 the Coast Guard. Um, what kind of energy is ESM geared to  
22 pick up?  
23  
24 WIT: Just radio frequencies.  
25  
26 LT JOHNSON: RF energy?  
27  
28 WIT: Yes.  
29  
30 LT JOHNSON: Can you detect RF energy submerged?  
31  
32 WIT: No.  
33  
34 LT JOHNSON: So what's the capabilities of ESM while you  
35 are underwater?  
36  
37 WIT: It's inoperable.  
38  
39 LT JOHNSON: We talked a little about sweep rates. I want  
40 to make a point of clarification that I think is necessary.  
41 Okay no, never mind that. Um, in your signal strength, you  
42 mentioned you briefly touched on pulse width, PRF, and  
43 things of that nature. Do you have visual indicators on  
44 your equipment that might indicate a signal strength?  
45  
46 WIT: Um, we have no visual. You can um, there is no  
47 visual to tell the signal strength. There is a Early

1 Warning Receiver which is the same as what you are hearing  
2 over the headphones hooked into the equipment, but there is  
3 no visual adaptation of the signal strength.  
4  
5 LT JOHNSON: Have you ever heard of back blow radar?  
6  
7 WIT: I've, only in school.  
8  
9 LT JOHNSON: What does that tell you about a radar if you  
10 pick up back blow?  
11  
12 WIT: That you are either right behind the vessel or you  
13 are right on top of it, or right beside.  
14  
15 LT JOHNSON: Very close range. Um, what about the side  
16 lobes?  
17  
18 WIT: Um, the same. You are very very close or sitting to  
19 a port or starboard bow and I mean it is all, the radar is  
20 still pointing at you, but all you are getting is the  
21 signal from it.  
22  
23 LT JOHNSON: Are you aware of anything that can effect the  
24 output power of a radar, degrade it?  
25  
26 WIT: Um, I know that there are sea states and atmospheric  
27 conditions can alter the transmission width and to that  
28 nature, but I am still learning.  
29  
30 LT JOHNSON: Right. And I understand that you are just  
31 learning, do you have any feelings about magnetrons,  
32 crystals, wave guides?  
33  
34 WIT: Um, Understanding of the transmission path on how you  
35 receive, it goes through the wave guides to the magnetrons  
36 produce and analyzing the signal and trying to match it to  
37 that.  
38  
39 LT JOHNSON: Do you think that those things were degraded  
40 on the radar that you might actually have a radar contact  
41 that was closer than it would appear on the ESM?  
42  
43 WIT: Possibly, but it goes through two computers and so  
44 between the two of them they would purge. I mean they both  
45 have to match.  
46

1 LT JOHNSON: Prior to coming to periscope depth were you  
2 made aware of any information from sonar regarding any  
3 sonar contacts in the area?  
4  
5 WIT: Um, just what we um, if they had a periscope depth  
6 brief, ET1 Carter would have went, because I had just got  
7 up there, um over the open mike I did not hear anything,  
8 over the 7MC. I didn't hear anything, so I was trying to,  
9 actually I was um going over the primaries making sure our  
10 machines were set up right, so I didn't hear anything.  
11  
12 LT JOHNSON: How much time approximately do you think, in  
13 your estimation, that you were at periscope depth?  
14  
15 WIT: Probably two minutes - - three minutes.  
16  
17 LT JOHNSON: How much time of that did Petty Officer Carter  
18 actually spend on the headset?  
19  
20 WIT: Um, thirty to forty-five seconds, I handed him them  
21 and he doubled check all the signals to make sure I was  
22 correct in my adaptation of the signal strengths.  
23  
24 LT JOHNSON: Do you have a feel as to why there were no log  
25 entries for the time that you had the watch?  
26  
27 WIT: Um, Petty Officer Carter actually had the logbook.  
28 Um, the only logs unless we usually log um, contact after  
29 we analyze - - you know if it is a threat is the only time  
30 or if it is something that is of big interest, which is  
31 done at the analyzation and it is something, I mean if it  
32 is commercial analyzation if it is real close to us and we  
33 pick it up visually through the periscope then we are going  
34 to log it. But if its something that is probably a signal  
35 strength two or so that we can't see and we won't log it  
36 until it actually comes in closer and we are tracking it.  
37  
38 LT JOHNSON: Okay. I don't have any further questions.  
39  
40 LT(jg) KUSANO: This is LT Kusano. I just have a couple of  
41 questions. Um, how many contacts did you say you picked up  
42 on?  
43  
44 WIT: Um, to what I remember, I had three.  
45  
46 LT(jg) KUSANO: Three. Okay, how long would it have taken  
47 you to classify all of those?

1  
2 WIT: Probably, the time limit for the, to have all the  
3 initial analyzations out is five minutes. Depending on,  
4 maybe three to four minutes.  
5  
6 LT(jg) KUSANO: Do you, when you guys go to PD, does the  
7 OOD wait until you have classified all your contacts or  
8 does he just kind of, or they don't leave until - - you  
9 know do they ask you can we go down or do you guys want to  
10 classify all of them?  
11  
12 WIT: They usually leave it up to us as long as there is no  
13 threat contacts. Then it is up to them, they are going to  
14 get all their stuff done. If something moves or has a big  
15 significant change we will let them know and then usually  
16 we don't give recommendations but if it's a big significant  
17 change that has a safety factor then we are going to give  
18 them a recommendation.  
19  
20 LT(jg) KUSANO: Okay. This is the last question. Have you  
21 ever heard a four or five before?  
22  
23 WIT: Only in school.  
24  
25 LT(jg) KUSANO: Only in school. Okay.  
26  
27 LCDR SANTOMAURO: Petty Officer Bruner, LCDR Santomauro.  
28 Um, is it true to say that if you have contacts, that are  
29 not threat contacts, or if they are roughly three or below  
30 and you are up there to get a navsat and send a couple of  
31 messages to shore the officer of the deck wouldn't normally  
32 stay at periscope depth to ah, evaluate those distant  
33 contacts we would assume, is that right?  
34  
35 WIT: Unless we are in an area where we are looking for  
36 certain things and in war time, and we can tell, usually  
37 when we are at PD we can tell we are going to do the  
38 transmissions do what we have to do and then get down.  
39  
40 LCDR SANTOMAURO: Normally you would do whatever functions  
41 that are scheduled to be done at periscope depth and when  
42 you are finished with those even if evaluated all your  
43 contacts for training you are not going to sit up there,  
44 unless prior to that they decided that they would do that  
45 for training, am I right?  
46  
47 WIT: Yes.

1  
2 LCDR SANTOMAURO: Okay. And in this case do you know why  
3 you were at periscope depth?  
4  
5 WIT: Um, I did have the knowledge that we were just going  
6 to go up there and make sure the area was safe before we  
7 proceeded with emergency blow.  
8  
9 LCDR SANTOMAURO: So do you feel that you had enough time  
10 at periscope depth to do the proper search to ah, an ESM  
11 search for safety?  
12  
13 WIT: I believe so, because of the fact that we did not  
14 pick up any signal fours or signal fives, there should not  
15 have been a vessel that close enough.  
16  
17 LCDR SANTOMAURO: Do you think that a search was sufficient  
18 from an ESM standpoint?  
19  
20 WIT: Yes.  
21  
22 LCDR SANTOMAURO: That is all I have.  
23  
24 LT HEDRICK: Um, LT Hedrick. Um, a few questions.  
25 Hopefully, most of them are relatively quick just to get  
26 some things for the record. Um, you said that you have had  
27 approximately eight to ten underinstruction watches  
28 underway?  
29  
30 WIT: Yes.  
31  
32 LT HEDRICK: Do you have any other prior Navy experience  
33 underway in a vessel?  
34  
35 WIT: Um, that was actually my first underway.  
36  
37 LT HEDRICK: That was your first underway. The month  
38 underway, that was prior to February 9th?  
39  
40 WIT: Yes.  
41  
42 LT HEDRICK: Okay. What watchstations are you qualified to  
43 stand underway?  
44  
45 WIT: Um, qualified, I'm actually qualified with the  
46 helmsman/planesman and that is it. And I am actually close  
47 to finishing my ESM.

1  
2 LT HEDRICK: Okay. So you are close to finishing your ESM  
3 qual, but you are not formally qualified in the ESM watch?  
4  
5 WIT: Correct.  
6  
7 LT HEDRICK: Okay. So, although it could be - - it would  
8 be reasonably expected that you had a fair level of  
9 knowledge of basic ESM operations due to your qualification  
10 status?  
11  
12 WIT: Yes.  
13  
14 LT HEDRICK: Would the Navy allow you based upon this fair  
15 level of knowledge, to say work with other folks that are  
16 in training and sign off on their qualification card based  
17 upon their level of knowledge?  
18  
19 WIT: Um, from my point of view, I would not allow it, just  
20 because I have not had the time of actually standing the  
21 watch and I am still underinstruction and I am still  
22 learning to.  
23  
24 LT HEDRICK: Would the Navy allow you as an unqualified  
25 watchstander to sign the qual card of some other  
26 unqualified watchstander?  
27  
28 WIT: No.  
29  
30 LT HEDRICK: No, okay. So although you have a good level  
31 of knowledge and a broad experience base and a significant  
32 amount of training prior to coming to sea; you wouldn't be  
33 able to qualify other folks on this watchstation?  
34  
35 WIT: Correct.  
36  
37 LT HEDRICK: Um, one of the last things that you said, was  
38 that you had knowledge that you were at periscope depth to  
39 verify the area clear prior to doing emergency blow?  
40  
41 WIT: Um, that is the way I just understood it. It's  
42 procedure to go up and to have a periscope depth and check  
43 the area.  
44  
45 LT HEDRICK: Okay. So my question is did you hear anybody  
46 say that or overhear a conversation, or is that just based

1 on the fact you somehow knew that you were going to  
2 emergency blow soon?  
3  
4 WIT: Right. We had schedule and that's why - - I didn't  
5 overhear it in a conversation. I knew that we were going  
6 to emergency blow and so I knew that was what the periscope  
7 depth was for.  
8  
9 LT HEDRICK: So there was a written schedule somewhere of  
10 what was going to happen today or just a planned sequence  
11 of events?  
12  
13 WIT: The plan of the day.  
14  
15 LT HEDRICK: The plan of the day. It had a time for which  
16 this emergency blow - - - -  
17  
18 WIT: We were actually running behind, but they had a time  
19 schedule for everything.  
20  
21 LT HEDRICK: Okay. Do you know how far behind you were  
22 running? I know it is not your job to keep track of the  
23 plan of the day.  
24  
25 WIT: I have no clue.  
26  
27 LT HEDRICK: Okay. Um, you say you were at periscope depth  
28 for two to three minutes, is that correct?  
29  
30 WIT: Yes.  
31  
32 LT HEDRICK: Okay. If ah, if you had a contact, just one  
33 contact on ESM how long would it take you to do analysis on  
34 that contact? Without a overinstruction watch giving you  
35 guidance, how long would it take you to do that analysis.  
36 One contact signal strength three, nice clean signal.  
37  
38 WIT: Three to four minutes.  
39  
40 LT HEDRICK: It would take you three to four minutes?  
41  
42 WIT: Yes.  
43  
44 LT HEDRICK: Okay. How long ah, how long did it take you  
45 that day with what you believed was three contacts to  
46 determine if any of them were signal strength four or five?  
47

1 WIT: It's just a, a audible and um, you have to do it,  
2 usually the um, usually the officer of the deck takes about  
3 thirty seconds. So, within thirty seconds I got, I heard  
4 the hits. Immediately I let Petty Officer Carter listen to  
5 and check and he gave them back, so thirty seconds.  
6  
7 LT HEDRICK: At some point in that thirty seconds you had  
8 given or an approximate thirty seconds you had given the  
9 headset to Petty Officer Carter. Do you feel that you  
10 listened long enough to determine if they are a signal  
11 strength four or five?  
12  
13 WIT: Yes.  
14  
15 LT HEDRICK: So how much of that thirty seconds do you  
16 think that you took? I am just trying to get a rough idea  
17 on how long it took you in that given contact situation to  
18 determine whether, if it is a signal strength four or five.  
19  
20 WIT: It was probably about fifteen seconds for each of  
21 them, so it was probably a little bit more I would say.  
22  
23 LT HEDRICK: Okay. So you have said for the record that  
24 you heard the officer of the deck say "no close contacts"  
25 which you then made the statement "CONN/ESM no close  
26 contacts".  
27  
28 WIT: Correct.  
29  
30 LT HEDRICK: Do you recall any other formal communication  
31 or I guess even informal discussions that you heard over  
32 the open mike regarding contacts or the periscope depth  
33 evolution either between ESM and control or between sonar  
34 and control, or conversations that you can sometimes  
35 overhear in the vicinity of the periscopes?  
36  
37 WIT: I did not.  
38  
39 LT HEDRICK: You don't recall hearing anything else?  
40  
41 WIT: No.  
42  
43 LT HEDRICK: How many people where in the radio shack when  
44 you entered in the radio shack do you recall?  
45  
46 WIT: I believe it was just ET1 Carter and ET3 Harm.  
47



1 LT HEDRICK: Okay. Would you be able to recall if there  
2 were any civilians in radio at that time?  
3  
4 WIT: There were no civilians; we were not allowing any  
5 civilians radio.  
6  
7 LT HEDRICK: Okay. Um, how did you know to come up to the  
8 cruise mess for this evolution, was it ah, you just  
9 realized what was going on and you came up on your on  
10 volition or did somebody call down or send a message to  
11 you?  
12  
13 WIT: No, it is just my own premonitions sir. I went up  
14 there and asked them.  
15  
16 LT HEDRICK: Okay. So what gave you that indication that  
17 it was a good time for you to go up there?  
18  
19 WIT: We had just, we had just gotten done with the deep  
20 dive and I had come off the phones, we served lunch, I  
21 helped serve lunch, and I clean up and I believe I heard  
22 someone say we were about to go to PD. So I got permission  
23 from my Chief to go up to ESM to stand the watch.  
24  
25 LT HEDRICK: Okay. So you just overheard somebody on the  
26 mess deck, great.  
27  
28 WIT: Correct.  
29  
30 LT HEDRICK: Great. Um, I know that there are so schedule  
31 issues and that some things were running late or whatever  
32 and I also know that the wardroom eats separately from the  
33 crew, who eats on the crews mess. Did the meal go down at  
34 the scheduled time on the cruise mess?  
35  
36 WIT: I believe, because we had so many people we had two  
37 seatings, I believe we actually started getting the  
38 wardroom early and actually I believe I think, we let the  
39 civilians eat first and the officers second.  
40  
41 LT HEDRICK: So just for clarification on my part, I know  
42 that some of the MS's and the food service attendants like  
43 yourself are kind of dedicated towards crew mess or  
44 dedicated towards to the wardroom, where exactly are you  
45 working?  
46  
47 WIT: I was actually washing dishes.

1  
2 LT HEDRICK: You were washing dishes? So meals started  
3 early in the wardroom. Do you know if the meal started on  
4 time in the cruise mess?  
5  
6 WIT: Um, I believe that we started about on time.  
7  
8 LT HEDRICK: About on time. Okay. I don't have any other  
9 questions. Thank you Petty Officer Bruner.  
10  
11 MR. ROTH-ROFFY: Okay. This is Mr. ROTH-ROFFY. I would  
12 like to ask a couple of more questions. Could you describe  
13 the Early Warning Receiver?  
14  
15 WIT: It's a, the way it comes down to is, it comes off the  
16 ADF and ESM and its just - - -  
17  
18 LT HEDRICK: This is LT Hedrick. Before we get into  
19 classified issues. You feel free to talk in general terms,  
20 what it is, what its function is, and how it is utilized,  
21 whoever utilizes it. But please don't go into specific  
22 numbers or number ranges of the ESM. If you feel that you  
23 need to, we can stop the tape and me and you can discuss  
24 separately before we accidentally release classified  
25 information.  
26  
27 WIT: Um, it actually breaks down to, it is a audible  
28 speaker that, it's - - the Early Warning Receiver is  
29 actually listening to the same thing that the ESM operator  
30 is, by in terms of all the signals in the air, they  
31 actually hear the same, the same so if there is an obvious  
32 signal four or signal five, just loud. The officer of the  
33 deck can immediately order an emergency deep to avoid it,  
34 avoid a collision.  
35  
36 MR. ROTH-ROFFY: Does it use some sort of a computer to  
37 analyze the received signals to determine the signal  
38 strength and then set off an audible alarm?  
39  
40 WIT: Yes.  
41  
42 MR. ROTH-ROFFY: I don't understand.  
43  
44 WIT: It's actually ah, it receives strength and it's  
45 actually just a speaker that you are actually hearing. It  
46 is the signal strength as they come in.  
47

1 MR. ROTH-ROFFY: Okay. So is it the same audible signal  
2 that the ESM Operator hears through his headphones?  
3  
4 WIT: Yes.  
5  
6 MR. ROTH-ROFFY: And how is the Early Warning, how is that,  
7 just by the volume of the tone or the frequency? How would  
8 the officer of the deck know by listening to this that it  
9 is an alert of some kind?  
10  
11 WIT: It's just um, the officer of the deck will hear the  
12 same signal strength as the ESM Operator. They would know,  
13 they would have the knowledge of the signal four, signal  
14 five and if they hear that, then they are going to make the  
15 order to go deep.  
16  
17 MR. ROTH-ROFFY: If you can, if you can, can you describe  
18 the difference between a signal four or signal five or  
19 something lower than that? How does it sound differently?  
20  
21 WIT: Um, the tone of it is actually by PRF that's actually  
22 how low and high the volume is. But, just the differences  
23 is on the sweeps the machine is doing, a signal two is  
24 intermittent with some noise and a signal three is picking  
25 up every time, obvious a signal four is obvious hits with  
26 the side lobes in and a signal five is complete saturation.  
27  
28 MR. ROTH-ROFFY: Complete saturation meaning?  
29  
30 WIT: It's, suppose a point is sitting there right on top  
31 of you, a constant, a constant tone.  
32  
33 MR. ROTH-ROFFY: Is it a single frequency tone? How would  
34 you describe that constant tone?  
35  
36 WIT: It's instead of hearing a split second between each,  
37 you know a side lobe and a lobe, it's inside it so you hear  
38 nothing but the signal tone.  
39  
40 MR. ROTH-ROFFY: So in your opinion is it very fool proof  
41 to detect a signal strength four and five?  
42  
43 WIT: Yes.  
44  
45 MR. ROTH-ROFFY: I mean could it be possible to  
46 misinterpret a four and five from a three?  
47

1 WIT: It's - - sometimes it is possible if you have a lot  
2 of contacts.  
3  
4 MR. ROTH-ROFFY: And you ah, you stated that you kept the  
5 headsets for about fifteen seconds or twenty seconds and  
6 passed it to ET1?  
7  
8 WIT: Yes. I just wanted him to verify that ah, the  
9 information was correct.  
10  
11 MR. ROTH-ROFFY: And you stated that the officer of the  
12 deck took about thirty seconds before he made his call of  
13 no close contacts?  
14  
15 WIT: It was about thirty to forty-five seconds.  
16  
17 MR. ROTH-ROFFY: And how long after he made his call did  
18 you announce no close contacts?  
19  
20 WIT: It was made right after his.  
21  
22 MR. ROTH-ROFFY: Immediately after his?  
23  
24 WIT: Yes.  
25  
26 MR. ROTH-ROFFY: And how long before the OOD made his  
27 announcement were you prepared to make your announcement?  
28  
29 WIT: About, maybe a couple of seconds before his, I was  
30 ready.  
31  
32 MR. ROTH-ROFFY: Had the OOD made his announcement within  
33 fifteen seconds within periscope depth would you have  
34 delayed making your announcement, until you were ready?  
35  
36 WIT: I would have delayed, double-checked, made sure I was  
37 correct.  
38  
39 MR. ROTH-ROFFY: Okay. Regarding the, after achieving  
40 periscope depth you received some signals, you stated how  
41 many was that?  
42  
43 WIT: I believe three.  
44  
45 MR. ROTH-ROFFY: And did you make a report to the officer  
46 of the deck of those signals being received?  
47

1 WIT: No. I just started with the analyzation.  
2  
3 MR. ROTH-ROFFY: You stated that you are close to  
4 qualifying has an ESM watchstander. Could you quantify  
5 that a little bit? How close are you?  
6  
7 WIT: Um, ESM actually consists of two machines the WLR  
8 EIGHT W-L--R-8 and the BRD SEVEN and between the two qual  
9 cards I have maybe ten to fifteen signatures left.  
10  
11 MR. ROTH-ROFFY: Out of a total of how many signatures?  
12  
13 WIT: I have no clue, probably around forty to fifty, if  
14 not more.  
15  
16 MR. ROTH-ROFFY: So maybe seventy five percent towards  
17 achieving your qualification?  
18  
19 WIT: Correct.  
20  
21 MR. ROTH-ROFFY: Rough numbers. Okay, I believe that is  
22 all I have. Any other investigators need to ask any other  
23 questions before Bill Woody asks - - - -  
24  
25 LCDR SANTOMAURO: Just a short follow up question. This is  
26 LCDR Santomauro. Um, so if you were at a high density and  
27 you were getting saturated what would that indicate to you?  
28 Um, how would you call that?  
29  
30 WIT: Um, as officer of the deck would also hear that, if  
31 he didn't, if over the open mike I did not hear a  
32 recommendation to go deep, I would make the recommendation  
33 to go deep.  
34  
35 LCDR SANTOMAURO: So you were not, so you were not getting  
36 saturated at the time?  
37  
38 WIT: No.  
39  
40 LT HEDRICK: Just a point of clarification between Mr.  
41 ROTH-ROFFY and mine. Um, about how long, about how long  
42 did it take you to determine that you had no close contacts  
43 on this particular day?  
44  
45 WIT: Within thirty seconds I was completed.  
46

1 LT HEDRICK: Within thirty seconds you were done? Where  
2 you done prior to handing the headset to ET1 Carter?  
3  
4 WIT: I was sure of myself but I was, but I wanted his  
5 experience, I wanted him to double-check and verify.  
6  
7 LT HEDRICK: Okay. Do you hand the headset to Petty  
8 Officer Carter or did Petty Officer Carter take the headset  
9 from you as the qualified watchstander.  
10  
11 WIT: Ah, I handed them them to him.  
12  
13 LT HEDRICK: You handed the headset to him. Okay. Um,  
14 when you are listening to these contacts as you come up, is  
15 there ah, some type of selective switch that you have to do  
16 to dial up the different types of contacts or are you  
17 hearing them all at the same time, initially?  
18  
19 WIT: You are hearing them all initially and - - - -  
20  
21 LT HEDRICK: You are hearing them all initially?  
22  
23 WIT: Yes and you can actually select between the bands  
24 that you are listening to the contacts on different bands.  
25  
26 LT HEDRICK: And do you do this in determination of a close  
27 contact?  
28  
29 WIT: Um, you usually leave it in all, you receive all  
30 bands.  
31  
32 LT HEDRICK: Was it in all on February 9<sup>th</sup>.  
33  
34 WIT: Yes.  
35  
36 LT HEDRICK: Ah, so if you came up and so we established  
37 somewhere between fifteen and thirty seconds is how long  
38 you listened to the contacts before you were ready to say  
39 "no close contacts". If you came up and say you had three,  
40 four, or five contacts several signal strength two's and a  
41 signal strength three and one of the one's in the mix was  
42 signal strength five, how long do you think it would take  
43 your analysis before you could recommend no close contacts  
44 or close contact?  
45  
46 WIT: Well, the signal strength five would overcome, it  
47 would be a total and it would be obvious and it would be a

1 initial - - you are taught in school and on the boat that  
2 and the way they teach you is if the officer of the deck  
3 doesn't immediately . . .and you hear that; than you state  
4 that you recommend we go deep.  
5  
6 LT HEDRICK: So you wouldn't even wait for the officer of  
7 the deck to report "no close contacts" if you heard a  
8 signal strength five?  
9  
10 WIT: No.  
11  
12 LT HEDRICK: And you feel pretty obvious that you would  
13 hear it before the normal fifteen to thirty seconds that it  
14 would take for the watch otherwise?  
15  
16 WIT: Yes, sir.  
17  
18 LT HEDRICK: How about for signal strength four, does that  
19 take a little bit longer for a determination or?  
20  
21 WIT: It's with the experience that comes with - - as soon  
22 as you hear it, you recognize it, but it's not as, it's not  
23 as a complete saturation, it is not a continuous tone, but  
24 it is so fast that it is - - that you can tell that it is  
25 not. It would be, it almost seems like it would be, if  
26 would think about it the radar would be moving so fast, so  
27 it's obvious that you are picking up the other thing. So  
28 you are going to know it is a signal strength four.  
29  
30 LT HEDRICK: Okay. I'll ask a couple other questions and I  
31 hope you don't get embarrassed. We have talked a lot about  
32 sound saturation and tone or whatever, I think it would  
33 help the gentlemen who have never sat at that stand or have  
34 never been onboard a submarine and the folks that will  
35 listen to this tape, kind of give them some representation.  
36 So this tone you are talking about is this a continuous  
37 level tone or is it more of a chirping sound?  
38  
39 WIT: It's, it comes in as a chirp and a signal - - say a  
40 signal three would be a chirp chirp chirp with every sweep.  
41  
42 LT HEDRICK: And so each one of those chirps is  
43 representing that short period of time that what?  
44  
45 WIT: That - - - -  
46

1 LT HEDRICK: That the sensor is seeing the radar pointing  
2 at it?  
3  
4 WIT: Correct.  
5  
6 LT HEDRICK: Okay. Could you again demonstrate again that  
7 signal strength three?  
8  
9 WIT: It would be like a chirp chirp chirp.  
10  
11 LT HEDRICK: Okay. And what would a signal strength five  
12 sound like?  
13  
14 WIT: It would be just a continuous urrrrrrr! {The witness  
15 made the sound urrrrrr.} Just like you are sitting on it.  
16  
17 LT HEDRICK: Distinctly different?  
18  
19 WIT: Yes, sir.  
20  
21 LT HEDRICK: Would the volume of that sound be different in  
22 that headset and for the same radar one at a distance for  
23 signal strength three and its moved in closer to where you  
24 get a signal strength five, but the volume of what your  
25 listening to changes?  
26  
27 WIT: Volume wouldn't change, the PRF is what determines  
28 the volume so.  
29  
30 LT HEDRICK: Okay. So the volume of that given signal  
31 doesn't change? Um, and then you are listening to all  
32 different chirps at the same time from different emitters?  
33  
34 WIT: Correct.  
35  
36 LT HEDRICK: And are you able to - - you mentioned  
37 something about a PRF that is a radar characteristic, it is  
38 a technical issue, how do you determine or distinguish  
39 between different emitters audibly?  
40  
41 WIT: Audibly by the tones. By their PRF you can tell  
42 which emitters are coming in.  
43  
44 LT HEDRICK: So there will be a whole range of different  
45 pitches? So you would here some chirp chirp and then some  
46 lower stuff?  
47



1 WIT: Yes.  
2  
3 LT HEDRICK: Okay. Well thank you. No further questions.  
4  
5 MR. ROTH-ROFFY: Can we have him - - This is Tom ROTH-  
6 ROFFY. Can we on the same lines have him demonstrate what  
7 a signal strength five sounds like? I thought you were  
8 going to go in that direction.  
9  
10 LT HEDRICK: He did.  
11  
12 MR. ROTH-ROFFY: I am sorry. A five?  
13  
14 LT HEDRICK: Yeah, he did a three and then a five.  
15  
16 LT HEDRICK: Okay why don't we just, LT Hendrick, why don't  
17 we just go through the sequence again so it is all in the  
18 same section of the tape. Signal strength three contact?  
19  
20 WIT: Chirp chirp chirp and on a signal strength four you  
21 will be picking up the side lobes chirp chirp chirp chirp  
22 and then five would be a continuous urrrr!  
23  
24 LT HEDRICK: So the chirp, LT Hedrick still, the chirp from  
25 the side lobes is slightly different from the main lobe you  
26 are hearing a stronger chirp and I thought I heard several  
27 quieter chirps and then another stronger chirp?  
28  
29 WIT: Correct.  
30  
31 LT HEDRICK: So you do get a little bit difference in  
32 volume and tone from those side lobes?  
33  
34 WIT: Yes.  
35  
36 LT HEDRICK: Thank you.  
37  
38 MR. STRAUCH: Ah yes, this is Barry Strauch. Um, sounds  
39 like you heard signal strength one through five pretty  
40 often?  
41  
42 WIT: Um, just from school is where I have heard the fours  
43 and the fives.  
44  
45 MR. STRAUCH: From School. How long was your school?  
46  
47 WIT: Um I was in school for a total for about a year.

1  
2 MR. STRAUCH: About a year?  
3  
4 WIT: In Connecticut.  
5  
6 MR. STRAUCH: Okay. What proportion of that training was  
7 devoted to signal strengths one through five?  
8  
9 WIT: Um, I think WLARA Eight training was from anywhere  
10 from a month to a month and a half.  
11  
12 MR. STRAUCH: So you spent ten percent of your time?  
13  
14 WIT: Yes.  
15  
16 MR. STRAUCH: What was the other ninety percent spent on in  
17 general terms?  
18  
19 WIT: It is just a whole overview of the, everything you  
20 um, it is split up into probably fifty to sixty percent  
21 that you actually are up in radio learning about all the  
22 different radio pieces of gear. The other time you are in  
23 the ESM, two different buildings, and you learn about each  
24 piece of different gear. So it's, all the time is spilt,  
25 they have a certain schedule they spilt between each piece  
26 of gear. Just trying to get you an overview. General  
27 knowledge of everything.  
28  
29 MR. STRAUCH: Okay so ten percent was spent on this and the  
30 other ninety- percent was overview and discussion of the  
31 equipment, principles, and so on and so forth?  
32  
33 WIT: Well it is just like ten percent of is everything.  
34 Operation, you do prac facts,, you actually go in and  
35 operate the gear coming in with test signals so you can  
36 analyze them.  
37  
38 MR. STRAUCH: Out of that ten percent of how much time was  
39 actually spent listening to these sounds?  
40  
41 WIT: Probably about eighty percent.  
42  
43 MR. STRAUCH: So the overall proportional wasn't ten  
44 percent, some proportional of it was. Um, does the  
45 equipment need to be calibrated?  
46

1 WIT: Um, actually the tuners, it has an indicator if they  
2 come out of calibration there is a function that you select  
3 where you can actually recalibrate them. You do regular  
4 PMS on them, too. Just regular PMS.  
5  
6 MR. STRAUCH: How regular do you do it?  
7  
8 WIT: I have actually have not performed the PMS by the  
9 work schedule. But I believe that it is done weekly, maybe  
10 monthly.  
11  
12 MR. STRAUCH: Okay. So what are the other variables that  
13 can effect it? Missing a vessel? Missing the radar? Is  
14 it that the equipment that has been calibrated, is that  
15 correct?  
16  
17 WIT: Correct.  
18  
19 MR. STRAUCH: And you don't know yourself personally, if  
20 this equipment has been calibrated?  
21  
22 WIT: By the schedule I know that it has been, but I have  
23 not been the actual one performing the maintenance.  
24  
25 MR. STRAUCH: Do you know who would have done it?  
26  
27 WIT: Ah, it is all on a schedule, so no. I just know what  
28 I have been scheduled for.  
29  
30 MR. STRAUCH: Okay. Did you ever hear a signal ah, a  
31 signal and then you hand it off to ET1 Carter and then have  
32 them say "no", that is not what you think it is, it is  
33 actually something else?  
34  
35 WIT: No.  
36  
37 MR. STRAUCH: Never. How often um, what you said is that  
38 you have been doing this for about a month on the  
39 GREENVILLE?  
40  
41 WIT: Standing - - -  
42  
43 MR. STRAUCH: As a radio ah, underinstruction.  
44  
45 WIT: Actually the month that we were underway, which was  
46 previous to this was the first time that we were out to

1 sea, so I was able to get in and stand the U/I, so within  
2 that month, I stood eight to ten.  
3  
4 MR. STRAUCH: Eight to ten?  
5  
6 WIT: Yes.  
7  
8 MR. STRAUCH: Okay. Ah, you said that at one point, ET1  
9 Carter ah, took the headset that you gave him. Was there  
10 speakers on in the background?  
11  
12 WIT: Um, over the open mike you can hear the Early Warning  
13 Receiver.  
14  
15 MR. STRAUCH: So he really didn't need the headphones did  
16 he, to listen to it?  
17  
18 WIT: No, but as a wilder and guarantee that I had made  
19 them.  
20  
21 MR. STRAUCH: Okay. Alright that is all that I have.  
22  
23 LT HEDRICK: Just for the record seeing how we are done  
24 with questions. The specific testing that is done on the  
25 ESM sweep as well as all the other sensors are completed on  
26 return to port has been provided to the NTSB for your own  
27 analysis.  
28  
29 MR. STRAUCH: Thank you.  
30  
31 MR. WOODY: Petty Officer Bruner there is a number of  
32 personal questions that we ask each person that we  
33 interview. And um, what is your age please?  
34  
35 WIT: nineteen.  
36  
37 MR. WOODY: Nineteen. And your height and weight?  
38  
39 WIT: I believe I am 5' 10" and around one hundred and  
40 sixty eight pounds.  
41  
42 MR. WOODY: Okay. And, ah you've already described your  
43 job for us? What about your education, what education do  
44 you have?  
45  
46 WIT: Ah, graduated high school, came straight into the  
47 Navy. After boot camp I went straight to Groton,

1 Connecticut for a year of radioman training. And ah,  
2 reported to my boat.  
3  
4 MR. WOODY: Did you go to submarine school?  
5  
6 WIT: Yes.  
7  
8 MR. WOODY: And was that in the year of training?  
9  
10 WIT: Yes.  
11  
12 MR. WOODY: So how long was submarine school and how long  
13 was the radio training  
14  
15 WIT: I believe submarine school is only like six weeks.  
16  
17 MR. WOODY: Six weeks. And the rest of the time was with  
18 the radio course?  
19  
20 WIT: Yes.  
21  
22 MR. WOODY: Is it radio ESM or is it just a radio course?  
23  
24 WIT: It was radio ESM.  
25  
26 MR. WOODY: Radio ESM. Are you qualified in submarines?  
27  
28 WIT: No.  
29  
30 MR. WOODY: Okay. As you mentioned, you have stood a  
31 number of watches. These would be very brief watches when  
32 the ship comes to periscope depth and then you go back  
33 down? Could you describe the length of the watches  
34 involved in?  
35  
36 WIT: Usually it is, because I have been mess cranking the  
37 whole time. It's whenever I had the opportunity to get up  
38 there, so it's, I would come up there stand an actual  
39 ascent to periscope depth, if there is any contacts I will  
40 analyze them, and once that I have established that I have  
41 got all of the reports and all the analization done, then  
42 if they need, whenever they need me they will send someone  
43 up to have me relieved.  
44  
45 MR. WOODY: Okay. And um, the form that we are going to  
46 ask you to fill out, your your ski - - the XO on your boat

1 told you to fill it out and um it tells the seventy two-  
2 hour history so we will not go into that. Allowing you to  
3 get that filled out and get that to us. I would like to  
4 ask you, how do you regard your health? Are you having any  
5 health problems?  
6  
7 WIT: No, sir.  
8  
9 MR. WOODY: Are you taking any medications prescribed by a  
10 physician - - doctor?  
11  
12 WIT: No, sir.  
13  
14 MR. WOODY: Do you do any self - - any self medications  
15 recently, say before the accident, for colds, any thing  
16 like that?  
17  
18 WIT: No, sir.  
19  
20 MR. WOODY: Okay. Do you wear glasses?  
21  
22 WIT: No, sir.  
23  
24 MR. WOODY: As there been any events in your life  
25 traumatically effect - - event like sad or depressing or on  
26 the other hand anything events that were very happy? Any  
27 ups or downs say the last month or so?  
28  
29 WIT: Not within the last month or so, no sir.  
30  
31 MR. WOODY: I think that is all the questions that I have.  
32  
33 WIT: Thank you, sir.  
34  
35 MR. WOODY: Thank you.  
36  
37 MR. ROTH-ROFFY: Okay so the time is now about 11:30 and  
38 that concludes our interview with Petty Officer Bruner.  
39  
40  
41  
42  
43  
44  
45  
46  
47